

Product Data Sheet

Biotin anti-human CD51/61

Catalog # / Size: 304412 / 100 µg

Clone: 23C6

Isotype: Mouse IgG1, κ

Workshop Number: V S246

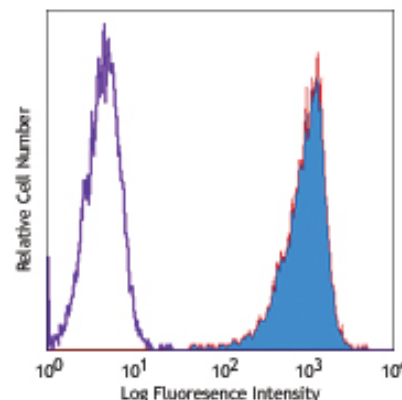
Reactivity: Human, **Cross-Reactivity:** Rabbit (Lapine), Chicken³

Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. **Do not freeze.**



Human melanoma cell line M21 stained with biotinylated 23C6, followed by Sav-PE

Applications:

Applications: FC - *Quality tested*
 IHC - *Reported in the literature*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation⁵, immunohistochemical staining of acetone-fixed frozen tissue sections⁵, immunofluorescence microscopy⁵, and blocking of cell adhesion^{4,6}. The LEAF™ Purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 304414).

Application References:

- Knapp WB, *et al.* 1989. Leucocyte Typing IV Oxford University Press. New York.
- Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
- Horton M, *et al.* 1991. *Exp. Cell Res.* 195:368.
- Takahashi R, *et al.* 1999. *Blood* 93:1951. (Block)
- Davies J, *et al.* 1989. *J. Cell Biol.* 109:1817. (IF, IHC, IP)
- Deregibus MC, *et al.* 2007. *Blood* doi:10.1182/blood-2007-03-078709. (FC, Block)
- Barau A, *et al.* 2010. *J. Ultrasound Med.* 29:173. PubMed

Description: CD51/CD61 is an integrin complex known as αvβ₃. It is expressed at high levels on osteoclasts, endothelial cells, and melanoma cells and at low levels on platelets and macrophages. CD51 is a heterodimer composed of disulfide-linked 125 kD and 24 kD proteins. CD61 is also a member of the integrin family known as gpIIb or β₃ integrin. It is a 110 kD common β subunit of CD51/CD61 or CD41/CD61 complex. CD51/CD61, also known as the vitronectin receptor, mediates the binding of platelets to immobilized vitronectin without prior activation. Other ligands include RGD-containing proteins such as fibrinogen, fibronectin, von Willebrand factor (vWf), laminin, thrombospondin and the neural adhesion molecule L1. CD51/CD61 also mediates cell-cell adhesion via interaction with CD31. CD51/CD61 acts as an activation-independent receptor for platelet attachment and spreading on vitronectin and other RGD-containing proteins, including matrix components. The 23C6 antibody has been reported to be useful for blocking studies.

Antigen References:

- Davies J, *et al.* 1989. *J. Cell Biol.* 109:1817.
- Nesbitt S, *et al.* 1993. *J. Biol. Chem.* 268:16737.

Related Products:

Product	Clone	Application
Biotin Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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